

## Message Text

PAGE 01 TOKYO 10651 01 OF 02 040145Z

66

ACTION OES-04

INFO OCT-01 EA-06 ISO-00 ERDA-05 AID-05 CEA-01 CIAE-00

CIEP-01 COME-00 DODE-00 EB-07 FPC-01 H-02 INR-07

INT-05 L-03 NSAE-00 NSC-05 OMB-01 PM-03 USIA-06

SAM-01 SP-02 SS-15 STR-04 TRSE-00 FRB-03 FEA-01 PA-01

PRS-01 CEQ-01 EPA-01 DOTE-00 HUD-01 NASA-01 /095 W

----- 062019

R 040055Z AUG 75

FM AMEMBASSY TOKYO

TO SECSTATE WASHDC 2167

INFO HEADQUARTERS ENERGY RESEARCH AND DEVELOPMENT ADMIN-  
ISTRATION WASHINGTON DC

NATIONAL SCIENCE FOUNDATION WASHINGTON DC

LIMITED OFFICIAL USE SECTION 1 OF 2 TOKYO 10651

E. O. 11652: N/A

TAGS: ENRG, TECH, JA

SUBJ: JAPAN'S ENERGY R&D GOALS

BEGIN UNCLASSIFIED

SUMMAR: LONG-RANGE GOALS FOR ENERGY RESEARCH AND DEVELOPMENT HAVE BEEN WORKED OUT FOR THE FIRST TIME IN JAPAN BY THE ENERGY SCIENCE AND ENGINEERING SUBCOMMITTEE OF THE PRIME MINISTER'S COUNCIL FOR SCIENCE AND TECHNOLOGY. THE GOALS WILL BE RECOMMENDED TO THE PRIME MINISTER THIS AUTUMN AFTER FURTHER STUDY BY THE COUNCIL. END SUMMARY.

1. ON JULY 24, THE ENERGY SCIENCE AND ENGINEERING SUBCOMMITTEE OF THE PRIME MINISTER'S COUNCIL FOR SCIENCE AND TECHNOLOGY SUBMITTED A REPORT TO THE COUNCIL ON THE LONG-RANGE GOALS OF ENERGY RESEARCH AND DEVELOPMENT LOOKING TOWARD THE YEAR 2000. THE 600-PAGE REPORT WILL BE FURTHER STUDIED BY THE COUNCIL BEFORE BEING SUBMITTED TO THE PRIME MINISTER NEXT AUTUMN IN THE FORM OF A RECOMMENDATION. THIS IS THE FIRST TIME THAT COMPREHENSIVE, LONG-RANGE GOALS OF

LIMITED OFFICIAL USE  
LIMITED OFFICIAL USE

PAGE 02 TOKYO 10651 01 OF 02 040145Z

ENERGY R&D HAVE BEEN WORKED OUT IN JAPAN.

2. THE REPORT, A PRODUCT OF TWO YEARS' STUDY BY 25 EXPERTS, PROPOSED EARLY FORMULATION OF A BASIC PROGRAM FOR ENERGY RESEARCH AND

DEVELOPMENT AND STRESSED THE IMPORTANCE OF THE ROLE TO BE PLAYED BY THE CENTRAL GOVERNMENT IN ACCELERATING ENERGY RESEARCH AND DEVELOPMENT. THE REPORT IDENTIFIED COAL, OIL AND NATURAL GAS, NUCLEAR ENERGY, SOLAR ENERGY, GEOTHERMAL ENERGY, AND ENERGY CONSERVATION AS THE MAJOR FIELDS OF RESEARCH AND DEVELOPMENT, AND QUANTIFIED ENERGY SUPPLIES WHICH WILL BE MADE AVAILABLE IN 1985 AND 2000 THROUGH ACCELERATED RESEARCH AND DEVELOPMENT.

3. FOR EACH OF THE ALTERNATIVE ENERGY SOURCES, FOLLOWING ARE GOALS TO BE ATTAINED THROUGH R&D:

COAL--THE AMOUNT OF DOMESTIC COAL WHICH CAN BE EXPLOITED IS ESTIMATED AT ONLY 1 BILLION TONS. IN ORDER TO ENSURE ITS EFFECTIVE UTILIZATION, 20 MILLION TONS AND 40 MILLION TONS OF GASIFIED OR LIQUEFIED COAL SHOULD BE PRODUCED ANNUALLY BY 1985 AND 2000 RESPECTIVELY. (OVER AND ABOVE WHAT WILL BE MINED IN SOLID FORM).

OIL, NATURAL GAS--AS OF 1973, DOMESTICALLY EXPLOITABLE RESERVES OF OIL AND NATURAL GAS AMOUNTED TO 3.57 MILLION TONS AND 11 BILLION CUBIC METERS RESPECTIVELY. THROUGH ADVANCEMENTS IN EXPLORATION AND EXPLOITATION TECHNIQUES, A TOTAL OF 5 MILLION KILOLITERS (OIL EQUIVALENT) OF OIL AND NATURAL GAS SHOULD BE OBTAINED ANNUALLY AFTER 1985 (ABOUT 1 PERCENT OF PROJECTED DEMAND).

NUCLEAR ENERGY--NUCLEAR ENERGY IS THE MOST PROMISING SOURCE OF ENERGY. LIGHT WATER REACTORS WILL BE THE MAIN TYPE OF POWER REACTOR UNTIL THE END OF THIS CENTURY, BUT NEW TYPES OF REACTORS WILL BEGIN CONTRIBUTING TO THE ELECTRIC POWER SUPPLY FROM THE LATTER HALF OF THE 1980'S. 50 MILLION KW AND 100 MILLION KW OF NUCLEAR POWER CAPACITY ARE EXPECTED IN 1985 AND 2000 RESPECTIVELY (RISING FROM .6 PERCENT TO NEARLY 20 PERCENT OF ENERGY CONSUMPTION).

SOLAR ENERGY--SOLAR HOT WATER SUPPLY AND HEATING WILL BEGIN TO BE COMMERCIALY AVAILABLE IN THE 1980'S AND SOLAR COOLING IN THE 1990'S. IT IS EXPECTED THAT SMALL-SCALE SOLAR POWER GENERATION FACILITIES WILL BE CONSTRUCTED RELATIVELY EARLY. AS A RESULT, SOLAR ENERGY AVAILABILITY IN TERMS OF OIL EQUIVALENT WILL BE 1 MILLION KILOLITERS PER YEAR IN 1985 AND 5 MILLION KILOLITERS PER YEAR IN 2000.

GEOTHERMAL ENERGY--ADVANCED DRILLING TECHNIQUES WILL MAKE IT POSSIBLE TO SUPPLY 3 MILLION KW AND 10 MILLION KW OF GEOTHERMAL POWER BY 1985 AND 2000 RESPECTIVELY.

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 TOKYO 10651 01 OF 02 040145Z

CONSERVATION--AS HIGH-VOLTAGE POWER TRANSMISSION CABLES AND INSULATED BUILDINGS BECOME AVAILABLE, 3 TO 5 PERCENT OF CURRENTLY PROJECTED ENERGY CONSUMPTION CAN BE SAVED IN 1985 AND 6 TO 8 PERCENT IN 2000. AN ADDITIONAL 10 PERCENT MAY BE SAVED THROUGH WASTE HEAT UTILIZATION. ANOTHER 10 PERCENT CONSERVATION WILL ALSO BE POSSIBLE THROUGH CHANGES IN LIFE STYLE. ALL TOLD, ABOUT 30 PERCENT OF ENERGY WILL BE SAVED.

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 01 TOKYO 10651 02 OF 02 040159Z

61

ACTION OES-04

INFO OCT-01 EA-06 ISO-00 ERDA-05 AID-05 CEA-01 CIAE-00

CIEP-01 COME-00 DODE-00 EB-07 FPC-01 H-02 INR-07

INT-05 L-03 NSAE-00 NSC-05 OMB-01 PM-03 USIA-06

SAM-01 SP-02 SS-15 STR-04 TRSE-00 FRB-03 FEA-01 PA-01

PRS-01 CEQ-01 EPA-01 DOTE-00 HUD-01 NASA-01 /095 W

----- 062061

R 040055Z AUG 75

FM AMEMBASSY TOKYO

TO SECSTATE WASHDC 2168

INFO HEADQUARTERS ENERGY RESEARCH AND DEVELOPMENT ADMIN-

ISTRATION WASHINGTON DC

NATIONAL SCIENCE FOUNDATION WASHINGTON DC

LIMITED OFFICIAL USE FINAL SECTION OF 2 TOKYO 10651

## GOALS FOR ENERGY SUPPLIES THROUGH ALTERNATIVE SOURCES

(FIGURES IN PARENTHESES ARE IN UNITS OF

TEN THOUSAND KILOLITERS OF OIL OR OIL EQUIVALENT)

	1985	2000
COAL	20,000,000 TONS/YEAR (1,400)	40,000,000 TONS /YEAR (2,800)
OIL, NATURAL	5,000,000 KL/YEAR '	5,000,000 KL/YEAR '
GAS	(500)	(500)
NUCLEAR POWER	50,000,000 KW CAPACITY (8,000)	100,000,000 KW CAPACITY (15,000)
SOLAR ENERGY	1,000,000 KL/YEAR ' (100)	5,000,000 KL/YEAR ' (500)
GEOTHERMAL	3,000,000 KW CAPACITY	10,000,000 KW CAPACITY
ELECTRIC ENERGY	(500)	(1,600)
-----		
TOTAL	(10,500)	(20,400)
-----		

' OIL EQUIVALENT

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 TOKYO 10651 02 OF 02 040159Z

4. THE MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY (MITI), MEAN-  
WHILE, HAS BEGUN STUDYING PLANS FOR ESTABLISHMENT OF A "NEW ENERGY  
TECHNICAL DEVELOPMENT RESEARCH INSTITUTE" AS THE CENTRAL BODY FOR  
IMPLEMENTING THIS "SUNSHINE" PROJECT FOR DEVELOPING ALTERNATIVE  
ENERGY SOURCES. BY CREATING THIS INSTITUTION DURING THE NEXT FIS-  
CAL YEAR, MITI HOPES TO BEGIN FIELD EXPERIMENTS FOR SOLAR THERMAL  
POWER GENERATION AND COAL GASIFICATION AHEAD OF THE OTHER SUNSHINE

PROJECTS, NAMELY, HYDROGEN ENERGY AND GEOTHERMAL ENERGY. MITI BELIEVES ESTABLISHMENT OF SUCH AN INSTITUTION IS ESSENTIAL TO DEVELOPMENTAL RESEARCH OF ALTERNATIVE ENERGY SOURCES SINCE NONE OF THE EXISTING NATIONAL RESEARCH INSTITUTES OR GOVERNMENT AGENCIES IS CAPABLE OF UNDERTAKING LARGE-SCALE FIELD EXPERIMENTS FOR ENERGY RESEARCH AND DEVELOPMENT. END UNCLASSIFIED

BEGIN LIMITED OFFICIAL USE

5. COMMENT: WITH ONLY LIMITED FUNDS AVAILABLE TO IT (\$13 MILLION) THE SUNSHINE PROGRAM HAS BEEN MORE A PLANNING EXERCISE THAN A HARDWARE RGD PROGRAM. RUMORS HAVE PERSISTED THAT IT MIGHT BE ABANDONED IN THE NEXT FISCAL YEAR. THE LATEST EFFORT TO PUT SUBSTANCE IN THE PROGRAM, AS OUTLINED ABOVE, APPEARS TO BE A CRITICAL STEP IN DETERMINING WHETHER MITI WILL BE SUCCESSFUL IN GETTING REAL FINANCIAL SUPPORT BEHIND GOVERNMENTAL ENERGY R&D, SINCE FUNDING LEVELS FOR THE SUNSHINE PROGRAM HAVE BEEN MODEST TO DATE. IT IS ALSO INTERESTING THAT THOUGHT IS BEING GIVEN TO FACILITIES FOR CONDUCTING LARGE SCALE ENERGY R&D PROJECTS IN SOLAR ENERGY AND COAL CONVERSION. HERETOFORE, THE LEVEL OF LABORATORY-SCALE ENERGY R&D ACTIVITY HAS NOT APPEARED TO BE LARGE ENOUGH OR AGGRESSIVE ENOUGH TO WARRANT CONSIDERATION BEING GIVEN TO DEMONSTRATION-TYPE PROJECTS, BUT PRESSURES ON THE GOJ TO BE MORE ACTIVE IN THE IEA AND IN THE US-JAPAN BILATERAL ENERGY R&D AGREEMENT UNDOUBTEDLY HAVE HAD AN EFFECT ON THE TECHNICAL PROGRAM MANAGERS. WHETHER THE SCIENCE COUNCIL AND THE MINISTRY OF FINANCE SEE THINGS IN THE SAME LIGHT WILL BE THE REAL TEST. THERE PROBABLY IS STILL SOME CHANCE THAT JAPAN WILL LAG BEHIND THE OTHER MAJOR ENERGY CONSUMING NATIONS IN CONDUCTING ENERGY R&D, IN THE HOPE THAT IT WILL BE ABLE TO PURCHASE THE TECHNOLOGY OF OTHERS RATHER THAN BEING A MAJOR PARTNER IN JOINT DEVELOPMENT. THEREFORE EVENTS OF THE NEXT FEW MONTHS, IN PARTICULAR THE DEGREE OF ACCEPTANCE OF THE ENERGY R&D PLAN AND ITS INITIAL IMPLEMENTATION IN THE JFY 1976 BUDGET PROPOSAL, WILL BE SIGNALS OF THE EXTENT TO WHICH JAPAN WILL CARRY ITS LIMITED OFFICIAL USE  
LIMITED OFFICIAL USE

PAGE 03 TOKYO 10651 02 OF 02 040159Z

SHARE OF DEVELOPMENT OF ALTERNATIVE ENERGY SOURCES.

WHEN THE EMBASSY IS ABLE TO OBTAIN A COPY OF THE PLANNING DOCUMENT AND TO ANALYZE IT IN TERMS OF USG INTERESTS, FURTHER DETAILS WILL BE REPORTED. END LIMITED OFFICIAL USE.  
SHOESMITH

LIMITED OFFICIAL USE

<< END OF DOCUMENT >>

## Message Attributes

**Automatic Decaptioning:** X  
**Capture Date:** 26 AUG 1999  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** ENERGY, RESEARCH, DATA, PROGRAMS (PROJECTS)  
**Control Number:** n/a  
**Copy:** SINGLE  
**Draft Date:** 04 AUG 1975  
**Decaption Date:** 01 JAN 1960  
**Decaption Note:**  
**Disposition Action:** RELEASED  
**Disposition Approved on Date:**  
**Disposition Authority:** izenbei0  
**Disposition Case Number:** n/a  
**Disposition Comment:** 25 YEAR REVIEW  
**Disposition Date:** 28 MAY 2004  
**Disposition Event:**  
**Disposition History:** n/a  
**Disposition Reason:**  
**Disposition Remarks:**  
**Document Number:** 1975TOKYO10651  
**Document Source:** ADS  
**Document Unique ID:** 00  
**Drafter:** n/a  
**Enclosure:** n/a  
**Executive Order:** N/A  
**Errors:** n/a  
**Film Number:** D750268-0050  
**From:** TOKYO  
**Handling Restrictions:** n/a  
**Image Path:**  
**ISecure:** 1  
**Legacy Key:** link1975/newtext/t19750898/baaaafue.tel  
**Line Count:** 208  
**Locator:** TEXT ON-LINE, TEXT ON MICROFILM  
**Office:** ACTION OES  
**Original Classification:** LIMITED OFFICIAL USE  
**Original Handling Restrictions:** n/a  
**Original Previous Classification:** n/a  
**Original Previous Handling Restrictions:** n/a  
**Page Count:** 4  
**Previous Channel Indicators:**  
**Previous Classification:** LIMITED OFFICIAL USE  
**Previous Handling Restrictions:** n/a  
**Reference:** n/a  
**Review Action:** RELEASED, APPROVED  
**Review Authority:** izenbei0  
**Review Comment:** n/a  
**Review Content Flags:**  
**Review Date:** 16 JUL 2003  
**Review Event:**  
**Review Exemptions:** n/a  
**Review History:** RELEASED <16 JUL 2003 by BoyleJA>; APPROVED <18 NOV 2003 by izenbei0>  
**Review Markings:**

Margaret P. Grafeld  
Declassified/Released  
US Department of State  
EO Systematic Review  
06 JUL 2006

**Review Media Identifier:**  
**Review Referrals:** n/a  
**Review Release Date:** n/a  
**Review Release Event:** n/a  
**Review Transfer Date:**  
**Review Withdrawn Fields:** n/a  
**Secure:** OPEN  
**Status:** NATIVE  
**Subject:** n/a  
**TAGS:** ENRG, TECH, JA  
**To:** STATE INFO HEADQUARTERS ENERGY RESEARCH AND DEVELOPMENT ADMIN-  
ISTRATION ISTRATION ON WASHINGTON DC  
NATIONAL SCIENCE FOUNDATION WASHINGTON DC  
**Type:** TE  
**Markings:** Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 06 JUL 2006